

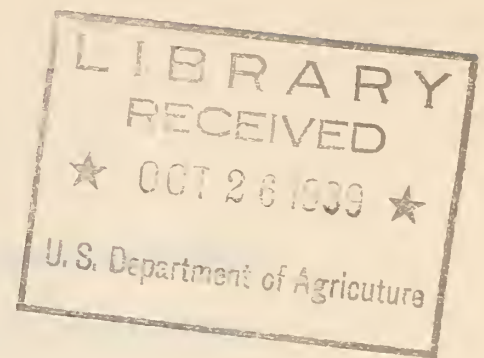
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UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE



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SHOULD NET-WEIGHT TRADING AND STANDARDS FOR TARE BE  
ADOPTED FOR AMERICAN COTTON?

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By

John W. Wright, Senior Agricultural Economist

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## CONTENTS

	<u>Page</u>
Foreword .....	1
Introduction.....	3
Weight basis of trading in cotton .....	4
Relation of cotton prices to the weight basis of trading .....	8
Standardization of tare .....	12
Financial aspects .....	15
Problems incident to the adoption of net-weight trading and standards for tare .....	17
The proposal from the standpoint of various interested parties.....	19
Relation of net-weight trading and standards for tare to improvements in cotton packaging .....	21

## FOREWORD

During recent years there has been much discussion within the cotton industry of possible ways of changing the prevailing gross-weight method of merchandising cotton to a system of marketing on the basis of net weights. Bills have been before Congress for several years to require the sale of cotton in interstate commerce on the basis of net weight. Some of these measures would also require the standardization of bagging and ties.

Cotton-marketing specialists of the Agricultural Marketing Service (formerly in the Bureau of Agricultural Economics) have collected much information as a background for appraising the merits of such a change in methods of marketing raw cotton. Some of this information has been published.

This pamphlet has been prepared because of the present interest in this subject and the number of inquiries received for information on specific points. It is hoped that the information as here presented in question-and-answer form will be helpful to cotton growers and other interested groups in their consideration of this important cotton-marketing subject.



Chief, Agricultural Marketing Service.





SHOULD NET-WEIGHT TRADING AND STANDARDS FOR TARE

BE ADOPTED FOR AMERICAN COTTON?

By John W. Wright, Senior Agricultural Economist

The modern cotton-textile industry of the world was developed primarily on the basis of American raw cotton. The inherent superior quality of this product is generally admitted. But the package in which American cotton is delivered to spinners has been the subject of criticism for more than a half century, particularly in foreign markets. Although manufacturers and processors of most American products have a reputation for the excellence of the packages in which their goods are sold, American cotton has been characterized as the most unsatisfactorily packaged product entering the channels of world commerce. This criticism applies to the so-called "square" bale in which approximately 98 percent of the American crop usually is packaged.

It has long been recognized that unsatisfactory packaging of American cotton is closely associated with the gross-weight basis of trading, with trade rules relating to bale tare, and with existing methods of sampling. Although it is generally admitted that there is need for improvement in marketing and packaging methods, the diversity of interests of the various elements in the cotton industry apparently has prevented such improvement being accomplished by voluntary action.

Beginning with the 70th Congress, First Session, (1927-28), one or more bills which would require the use of bale-covering materials that conform to definite standards and that transactions be based on net weights for all cotton for shipment in commerce, have been introduced at each session of Congress. Public hearings have been held in connection with a number of these bills at which interested parties have presented their views with respect to the proposed legislation.

Apparently there is a lack of clear understanding of the various factors involved in these proposed reforms in the marketing and packaging of cotton. With a view to supplying specific information concerning these factors and to facilitate a consideration of various aspects of the subject, the principal questions that have been raised from time to time are here listed and the available information relating to each is here briefly presented. No claim is made for completeness in the list of questions nor in the information presented.

For the convenience of the various groups in the cotton industry, the material of special interest to each group is indicated. Cotton growers will find the following questions of particular interest from their point of view: 1 to 13, 18 to 21, 24, 27 to 29, and 33. Ginners and compressmen will be especially interested in questions 18 to 24, 29, 33, and 34. Cotton merchants will be primarily concerned with questions 7 to 9, 16 to 22, 26, and 29 to 33. Items of special interest to cotton manufacturers are presented in connection with questions 14, 18 to 22, 27 to 30, and 33. Manufacturers and distributors of cotton-bale-covering materials will be particularly interested in questions 18, 21 and 22, 33 and 35.

#### WEIGHT BASIS OF TRADING IN COTTON

(1) What is meant by the proposal for net-weight trading in cotton?

The proposal for net-weight trading contemplates the use of the actual weight of lint cotton in a bale in connection with purchases and sales of raw cotton; that is, that payment for the cotton shall be based on the gross weight of the bale minus the weight of bagging, ties, and patches.

(2) What is the present weight basis of trading in cotton?

American cotton is now sold in domestic markets on the gross weight of the bales; that is, on the actual scale weight of the bale, which includes the weight of bale-covering materials. An exception is found in American-Egyptian or Pima cotton, which, from the beginning of that industry in Arizona, has been sold on net weight.

Note: The gross weight used in the settlement of domestic transactions in cotton is subject to deductions for over-tare. (See question 5, page 5.)

(3) What is the weight basis of trading in other cotton-producing countries?

According to the information available, cotton from all cotton-producing countries other than the United States and adjacent areas in Mexico, is sold on a net-weight basis.

(4) What is the weight basis of trading for other agricultural products?

According to the available information, all other American agricultural products that are sold by weight, are sold on net weight.



(5) May weight be added to cotton bales in the form of bagging, ties, and patches without limit under the gross-weight system of trading?

No. The weight of bale coverings must not exceed the tare allowance of the market in which the cotton is sold. Otherwise the seller of the cotton is subject to a claim for over-tare.

(6) What is the meaning of the term "tare"?

The term "tare" as herein used refers to the combined weight of the bagging, ties, and patches used in covering a bale of cotton.

(7) Who determines the allowable weight of bale coverings under the present system?

Allowable weight of bale coverings, under the present system, is fixed by the trading rules of the various cotton-trade and cotton-manufacturers' organizations. Purchases and sales of cotton that take place in the territory covered by each of the six regional trade groups affiliated in the American Cotton Shippers' Association, are made subject to the trading rules promulgated by these organizations. These rules specify the allowable tare on uncompressed gin bales. Markets that have organized exchanges have their own rules specifying allowable weights of bale coverings for cotton involved in transactions taking place in these markets.

The allowable tare on bales delivered to domestic mills is fixed by rules jointly established by cotton manufacturers and cotton-trade groups.

In the case of cotton sold in foreign markets, the allowable tare is specified in the trading rules of the various foreign cotton-trade organizations.

Several of the cotton-producing States have enacted laws regulating the packaging of raw cotton including bagging and ties used for covering bales. In others, general authority for regulation is given to an appropriate unit of the State Government that authorizes specific regulations governing such matters. In general, these statutes or regulations having to do with cotton-bale tare prescribe the number and weight of ties and the number of yards and weight of bagging that are required or allowed per bale. Usually the maximum weight of both bagging and ties is prescribed.

Considerable variation is found in the rules of the organized exchanges and trade associations relating to tare, as well as in the laws of the various cotton-producing States that have enacted legislation governing cotton-bale tare.



(8) What is the allowable tare on American cotton in various markets?

The rules of most of the cotton-trade organizations provide that for uncompressed gin bales, the weight of bagging shall not exceed 12 pounds and the weight of ties, including buckles, shall not exceed 9 pounds, or a total of 21 pounds for bale tare. These rules also provide that penalties shall be assessed against light-weight bales to compensate for the smaller proportion of lint cotton in such bales.

Domestic-mill rules provide that the tare shall not exceed 4.4 percent of the invoice weight of uncompressed bales and 4.8 percent of the weight of compressed bales. Thus, for a bale weighing 500 pounds gross, the allowable tare is 22 pounds for a gin bale and 24 pounds for a compressed bale. In the case of a compressed bale weighing 500 pounds gross and carrying 12 pounds of bagging and 9 pounds of ties, 3 pounds of patches are permitted. Otherwise the bale is subject to a claim for over-tare.

Cotton is exported to various foreign markets under the terms of a variety of contracts. Formerly most American cotton was exported under terms of so-called c.i.f. and 6 percent contracts. Under these contracts exporters pay all costs including insurance and freight to destination, and the cotton is invoiced at gross shipping weight minus 6 percent. However, the actual allowance for tare is 9 pounds of ties per bale and  $3\frac{9}{16}$  percent of the remaining weight for bagging and patches. For a 500-pound gross-weight bale the allowable tare is  $26\frac{1}{2}$  pounds. For anything in excess of the allowable tare, a deduction is made in the amount of settlement at the invoice price of the cotton. If the actual weight of bale coverings is less than the permissible  $26\frac{1}{2}$  pounds, the exporter does not, under these terms, receive a corresponding allowance. Under such circumstances, he finds it to his advantage to add patches up to the full tare allowance.

For example, if an exporter sells on Liverpool c.i.f. and 6 percent terms, 100 bales of cotton weighing 50,000 pounds gross and the sale price is 10 cents per pound, the amount of the invoice will be \$4,700 (50,000 pounds less 6 percent: 47,000 pounds at 10 cents equals \$4,700). If the tare on the 100 bales is 900 pounds for ties (9 pounds per bale), and 1,750 pounds for bagging and patches ( $17\frac{1}{2}$  pounds per bale), payment for the cotton would be made according to the invoice. If, upon arrival of the cotton, it was found that the actual weight of bale-covering materials was 28 pounds per bale, a deduction for 150 pounds of cotton ( $1\frac{1}{2}$  pounds per bale) would be made in the amount of the settlement. On the other hand, if the 100 bales weighing 50,000 pounds gross, carried 9 pounds each for ties and only 6 pounds for bagging and patches - a total of 15 pounds per bale for tare - the amount received for the



cotton would be the same as if the bales carried 26-1/2 pounds of tare; that is, \$4,700. In this case a total of 1,150 pounds more lint cotton (11-1/2 pounds per bale) would have been delivered. (To simplify this illustration, mutual weight clauses and other variations in these contracts have been omitted.)

In recent years the trend has been toward the exportation of American cotton under special sales contracts providing for settlement on the actual net weight of the cotton. During the season 1937-38, more than 30 percent of all American cotton exported was sold on actual net weight. The proportions of cotton exported on actual net weight to various countries during the same season were approximately as follows: Italy, 88 percent; Japan, 65 percent; United Kingdom, 24 percent; China, 45 percent, and France, 15 percent.

(9) Is there any disadvantage, under the gross-weight system, in using bale-covering materials that weigh less than the allowable tare?

Yes. The per-pound cost of bagging, ties, and patches usually is substantially lower than the price of cotton. This being the case, it pays the individual seller of cotton to use the heaviest materials permitted in order that he may receive pay for the maximum allowable weight in selling under the gross-weight system. If materials weighing less than the allowable tare are used, the amount received per bale is less, under the gross-weight system of trading, than it would be if the heaviest materials permitted by trade rules were used. It is thus apparent that the gross-weight system discourages the use of light-weight bagging, ties, or patches that otherwise would provide satisfactory protection for the cotton.

(10) Why not continue with the gross-weight system?

The present gross-weight system is responsible for wasteful and expensive practices in the packaging and marketing of cotton, which place a heavy financial burden on the marketing system as well as indirectly on cotton growers and on consumers of cotton goods. The adoption of net-weight trading, if properly arranged and safeguarded, would simplify the marketing process and would result in substantial economies in marketing.

Under the present gross-weight system with fixed allowances for tare, there is an incentive to choose bale-covering materials on the basis of cheapness and weight rather than for the protection afforded the bale contents. This not only results in the use of materials that fail to withstand the wear and tear of handling and shipment, but the extra weight beyond that which would actually be required for protection of the cotton, if suitable materials were



used, adds substantially to transportation and other costs. Costs are further increased by the application of patches to bring the bale tare up to the tare allowances of domestic and foreign markets. These unnecessary costs are in addition to the losses from damaged cotton that result from unsatisfactory protection to the bale contents.

At present, because of the differences in tare allowances between domestic and foreign markets, bales must be patched differently for domestic and foreign shipment. Therefore, the entire process of concentrating, storing, and merchandising involves extra trouble and expense. The adoption of net-weight trading, by removing the inducement to increase tare weight, would tend to simplify the marketing process as well as to reduce costs.

Moreover, under the gross-weight system, cotton growers are handicapped in their desire to use bagging made of cotton, even when relative costs favor their own product. The difference in weight between cotton and jute baggings is such that the grower is usually penalized financially if he uses bale-covering materials that weigh less than the allowable tare. Other light-weight bale-covering materials likewise are excluded so long as gross-weight trading continues.

#### RELATION OF COTTON PRICES TO THE WEIGHT BASIS OF TRADING

(11) Does the present gross-weight system enable farmers to make a profit on the bagging and ties for which they pay ginners in connection with the ginning and wrapping of their cotton?

Although in selling cotton by gross weight farmers receive the price of cotton for the weight of the bagging and ties used for wrapping the bales, they do not, in the final analysis, either make a profit on these materials or receive pay for them. This is because the weight of bagging and ties for which the farmer is paid is offset by the lower price received for the cotton under this system of selling.

The value of a bale of cotton is calculated on the actual weight of lint and the price per pound is reduced to compensate for the bale tare when the cotton is sold on gross weight. Thus the belief of some farmers that in selling gross weight they make a profit on the bagging and ties to the extent of the difference between the price they pay for such materials and the value of an equivalent weight of cotton, is purely an illusion.



(12) Would cotton growers receive less for a bale of cotton by selling on net weight?

Disregarding the savings and economies that would result from net-weight trading, the value of a bale of cotton is the same regardless of whether the basis of sale is net or gross weight. However, the number of pounds and the price per pound are different in each case. This is well illustrated by the fact that normally about one-half of the American crop is sold in foreign markets, where a modified form of net-weight trading has been in effect for many years.

The American exporter buys his cotton in this country on gross weights but must sell it abroad on net weights. Hence, in buying he must consider the weight of bagging and ties in his price calculations. He does this by adjusting his buying price downward to make allowance for the weight of bale-covering materials for which he must pay the grower, but which will be deducted when he, in turn, sells in the foreign market. If the exporter selling on net weight, can get 10-1/2 cents per pound for cotton and the tare is 24 pounds per bale, the equivalent value would be 10 cents per pound gross weight, while, if the bale carries 30 pounds of tare, the value would be 9.87 cents per pound. In other words, cotton merchants now have to buy cotton from farmers in this country on gross weight at prices that will enable them to sell the same cotton in foreign markets at a profit on the basis of net weight. Their purchase prices must necessarily be reduced to take account of the extra weight for which they must pay under the gross-weight system now prevailing in this country.

Additional evidence that cotton prices are lower under the gross-weight system than would otherwise be the case is afforded by a comparison of prices paid for cotton packaged in round bales with prices paid for cotton packaged in so-called square bales. The tare on square bales exceeds 4 percent of the gross weight of the bales while the tare on round bales is approximately 1 percent of the gross weight of such bales. Cotton merchants who buy cotton in both types of bales in the same markets pay 3 percent more per pound gross weight for cotton in round bales to compensate for the lighter tare on such bales.

Thus, the grower does not receive a greater return per bale on the gross-weight basis of selling because, in the final analysis, price calculations are based on the net weight of the cotton contained in the bales. If net-weight trading were adopted it could be expected that an adjustment upward would be made in cotton prices to compensate for the difference between net weight and gross weight.



(13) What assurance could cotton growers have that an adjustment would be made in cotton prices to compensate for the difference between the gross and the net weight of bales?

It has been shown that in making their purchases of cotton in this country American exporters whose sales prices are now based on net weights always make an adjustment for the bale tare for which they have to pay in making purchases in this country but for which they are not paid when the cotton is sold in foreign markets. Their purchase price is reduced in each instance to take account of the extra weight for which they must pay under the gross-weight system. If they could buy on net weight, they would not need to make this adjustment in calculating their purchase price and could pay growers proportionately higher prices per pound but the same amount per bale as when purchases are based on gross weight.

An assurance that this price adjustment would be made upon the adoption of net-weight trading is provided by the mechanics of the cotton-price system. The New York and Liverpool futures markets respond to the same conditions of world supply and demand. There is a definite, although not fixed, relationship between prices for the same delivery month in each of these markets. The Liverpool price usually is at a substantial premium over the New York price. The parity, or spread, between prices in the two markets reflects the cost of moving cotton from American ports and placing it in Liverpool as well as the difference in weight basis of trading in the two markets. The New York price is based on gross weight; the Liverpool price on net weight. As a consequence, the usual spread between prices in the two markets represents, in addition to the cost of placing the cotton in Liverpool, about 50 points, when the New York price is 9 cents, for the difference in the weight basis of trading.

If net-weight trading were adopted in this country, the spread between prices in the two markets would be reduced and, in comparison with Liverpool prices, New York prices would be proportionately higher than at present. It is a well-known fact that under customary trading conditions, traders watch for opportunities to profit by differences in prices between different futures markets that represent either more or less than actual cost of moving the cotton from one market to another. By straddle operations, these traders tend to keep the parity or spread at approximately this cost figure. Therefore, it could be expected that the New York price would be adjusted upward in relation to the Liverpool price, upon the adoption of net-weight trading in this country.

As it is customary in the cotton trade for a merchant's buying basis and selling basis for spot cotton to be definitely related to futures prices, if the adjustment for net weight were made for futures, it automatically would be made for spot cotton.

(14) Would cotton manufacturers be able to buy their raw cotton cheaper if purchases were based on net weight?

Although domestic manufacturers now pay for their cotton on the basis of gross weight, they buy in competition with exporters. Since export prices are based on net weight, domestic-mill prices, in the last analysis, are similarly based. Any given bale of cotton would be bought by a cotton manufacturer or an exporter at the same amount per bale whether on a net-weight or on a gross-weight basis, but the price per pound would be an entirely different figure in each case.

(15) What would be the equivalent prices for cotton under the two systems of selling?

This would depend upon the weight of tare on the bales. For a bale that weighs 500 pounds gross, the equivalent per-bale values and prices per pound for the gross-weight and net-weight bases with various weights of tare would be as follows:

Gross weight of bale	Weight of tare	Net weight of bale	Price based on net weight	Value per bale net weight	Price based on gross weight	Value per bale, gross weight
<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Cents</u>	<u>Dollars</u>	<u>Cents</u>	<u>Dollars</u>
500	15	485	10.00	48.50	9.70	48.50
500	18	482	10.00	48.20	9.64	48.20
500	19½	480½	10.00	48.05	9.61	48.05
500	21	479	10.00	47.90	9.58	47.90
500	22	478	10.00	47.80	9.56	47.80
500	24	476	10.00	47.60	9.52	47.60
500	26½	473½	10.00	47.35	9.47	47.35
500	30	470	10.00	47.00	9.40	47.00

(16) Would the cotton trade benefit or lose by the adoption of net-weight trading?

Under the present gross-weight system of trading with fixed allowances for tare, the cotton trade is able to make a profit by applying patches to the bales in order to bring the weight of bale-covering materials up to the allowable tare. This profit is possible because the cost of patching materials usually is less than the value of an equivalent weight of cotton. The difference between the price of cotton and the per-pound cost of patches represents a profit to the owner of the cotton at the time the patches are applied. Usually,



the gin bale carries less tare than is allowed in domestic-mill markets and in foreign markets. If transactions were conducted on the basis of net weight, the patching of cotton would be a direct charge against the cotton merchant and the possibility of selling such patches at the price of cotton would be eliminated.

However, under the competitive conditions existing in the cotton trade, profits from patching are perhaps more apparent than real in that such profits are taken into account in prices paid for or received from the cotton. It is doubtful whether in actual practice, profits in patching really increase the margins obtained by marketing agencies. On the other hand, marketing agencies would realize advantages from simplification of trading practices and from improvements in packaging practices that would accrue from a properly safeguarded system of net-weight trading.

(17) Would the adoption of net-weight trading affect the usefulness of the futures market for hedging purposes?

With all domestic transactions in both the spot and futures markets adjusted to net weights, hedging operations would not be affected. Hedging operations in connection with foreign transactions would be facilitated by the adoption of net-weight trading in that all transactions would then be on the same weight basis, which frequently is not the case at present. Differences in the weight basis of settlement tend to reduce the protection afforded by hedging.

#### STANDARDIZATION OF TARE

(18) What is meant by the proposal for the standardization of cotton-bale tare?

The proposal for the standardization of cotton-bale tare contemplates the adoption of definite standards with respect to strength, weight, and dimensions of materials used for covering cotton bales, including bagging, ties, and patches.

(19) Would net-weight trading be feasible without standardization of tare?

To ascertain the net weight of a bale of cotton, both the gross weight and the weight of tare must be known. At present, there is wide variation in weights of tare on cotton bales. The weight of tare on an individual bale usually changes one or more times while the bale is passing through marketing channels. On gin bales the original weight of tare is determined not so much by the



grower as by the ginner whose specific action with reference to the use of bale-covering materials and tare weights is likely to be somewhat influenced by the competition with which he is faced. Under present methods, even when ginner's attempt to keep the weight of bagging uniform, significant variations may result from irregularities in fabric weights and from inexact cutting of patterns. The addition of patches to the bale at the time of compressing combined with variations in weight of patches and in length, number, and weight of ties used on compressed bales, results in significant differences between the weight of the tare carried by bales as they are received from the gin and the weight of tare when the bales finally reach their place of consumption.

Thus, without the standardization of tare the weight of tare usually is not known and is not readily apparent. To ascertain the weight involves opening the bale, stripping and weighing the wrappings, and then recompressing the bale - a process that is costly and frequently not practicable. Under these circumstances, if an attempt were made to trade on the net-weight basis, it could be expected that every buyer of cotton would deduct enough tare to insure his own protection against claims of those to whom, in turn, he might sell. It seems reasonable to suppose that the burden of these precautions would fall back upon the grower, who might thus at times have to sustain deductions of weight in excess of actual tare.

(20) Could the full benefits of net-weight trading be realized without standardization of tare?

It is not likely that the full advantages of net-weight trading could be realized without positive provision for the standardization of bale-covering materials with respect to weight, strength, and dimensions. If net-weight trading were adopted, the incentive to add weight to the bales in the form of bale coverings would be removed and, without standardization of tare, it could be expected that those responsible for covering bales would then use the cheapest materials available, regardless of weight, and in doing so it is not improbable that the notoriously poor condition in which American cotton reaches spinners would be further accentuated.

It seems logical to suppose that, without some provision for standards for tare that would permit of conveniently and accurately ascertaining the weight of tare, the result would be similar to the situation that now exists in the European markets. These markets are now on a net-weight basis so far as price quotations are concerned. But because of the great variation in the weight of covering materials on American bales, it has been necessary for these markets



to establish an arbitrary figure for deducting tare. Naturally, this deduction approximates the weight of the heaviest bale-covering materials used. This in effect, induces the American exporter to add to the weight of tare by applying patches up to the allowable maximum. The net effect is an economic loss to the industry equal to the cost of the unnecessary patches plus the transportation and other charges on the extra weight. In the final analysis, this loss must be passed on to the grower, the price of whose cotton must be reduced accordingly, or to the consumer who thus has to pay proportionately more for cotton goods. Without some provision for standardization that would make it possible to ascertain the weight of tare conveniently and accurately, it is doubtful whether the full benefits of net-weight trading could be realized.

(21) Would the standardization of tare limit baggings that could be used to those made of cotton?

None of the proposals for standardization of tare that have been put forward to date contemplate the limiting of bale coverings to those made of any single material. Such a large quantity of bagging is required to cover the American crop that it is doubtful whether a single material could be prescribed as standard without increasing the cost to the growers. In view of the fact that a number of materials are now being used, it would appear desirable to establish standards for those materials that can be demonstrated to be satisfactory from the standpoint of physical suitability and that can be standardized within a reasonable range of tolerance. With selling prices calculated on net weight, there would be no incentive to use, nor disadvantage in using, any particular material from the standpoint of weight. This would permit the use of those standardized materials which are cheapest at any given time, so that the covering of the crop could follow the lines of greatest economy.

Although the use of bagging made of cotton cannot be fully practicable until cotton is sold on net weight, the adoption of net-weight trading does not necessarily mean that cotton would be used exclusively or even used at all. Rather the adoption of net-weight trading would be required to enable cotton to compete with other bagging materials.

(22) Would it be feasible to provide more than one weight standard for the same type of bale-covering material?

It would not be practicable to have standards for more than one weight of each distinctive type of material. Otherwise there would be confusion in ascertaining bale tare for purposes of net-

weight trading. Materials standardized for bagging, patches, or ties should be different enough to be positively and easily distinguishable. This would make it possible to know the weight of the tare on any bale of cotton by identifying the materials used as bale coverings.

(23) How is the weight of tare determined for purposes of net-weight trading in other cotton-producing countries?

With few exceptions the weight of bale tare is uniform in other cotton-producing countries. This permits the determination of the net weight of the bales without the necessity for stripping and weighing the bale coverings.

(24) How does the weight of cotton-bale tare in this country compare with that of other cotton-producing countries?

The allowable tare on American square bales of cotton varies from 4.4 to 5.4 percent of the gross weight, depending upon the bale density and the market in which sold. The tare on bales from countries that are the principal competitors of the United States in world cotton markets is from 2.0 percent to 3.0 percent of the gross weight.

Notwithstanding the extra weight of bale-covering materials, American cotton is generally admitted to be the most unsatisfactorily packaged cotton received in the world markets. It is thus apparent that methods of covering cotton bales in the United States involve considerable waste in the form of extra weight of materials used and for the transportation charges which this extra weight entails.

#### FINANCIAL ASPECTS

(25) Would standards for tare increase the cost of wrapping cotton?

If tare standardization were adopted in connection with net-weight trading and if standards were provided for each of the suitable bale-covering materials so as to make them competitive, the cost of wrapping cotton should not be any higher than under the present system. It is not improbable that with the handicap to the use of light-weight materials removed by the adoption of net-weight trading, costs of suitable bale coverings would be somewhat less than under the present system.



Somewhat less than 10 percent of the American cotton crop is covered, at present, with rerolled or reconditioned bagging of various kinds. This bagging is used principally in the southeastern States, where it is obtained from nearby cotton mills, placed in order for re-use, and distributed to ginneries in those areas. As such bagging is extremely variable in weight and strength, it is doubtful whether it could be standardized unless a range of tolerance so wide as to defeat the purposes of standardization were adopted. The elimination of this type of bagging by a standardization program that was not accompanied by net-weight trading would probably increase the cost of wrapping cotton in those areas where such bagging is now used. But as very little of the cotton grown in these areas is recompressed, light-weight burlap would probably be suitable and could be bought at prices comparable with second-hand bagging of the heavier materials. With net-weight trading there would be no disadvantage in using suitable light-weight bagging.

(26) To what extent, if any, is the competitive position of American cotton in world markets affected by our present tare practices?

The competitive position of American cotton is adversely affected by our present tare practices because:

(a) The unsatisfactory methods of packaging American cotton result in waste and damage to the cotton with attendant risks to foreign manufacturers which must be taken into account by them in the purchase of their raw material.

(b) A number of foreign countries levy import duties or special taxes on imports of raw cotton on the basis of gross weight. As American cotton exported to foreign markets now carries approximately 6-percent tare whereas most foreign bales carry less than 3 percent, the duty on the additional 3-percent tare, amounting to about 15 pounds per bale, places American cotton at a disadvantage in competition with cotton of other growths.

(c) The psychological effect on foreign buyers of the dilapidated appearance of American bales in comparison with the neater packages in which cotton of other growths is presented, is a factor in export sales.

(27) What would be the aggregate financial gain from the adoption of net-weight trading and standards for tare?

An exact measure of the total savings that would accrue from the adoption of net-weight trading and standards for tare is not possible. At a hearing conducted by the Committee on Agriculture



and Forestry of the United States Senate in May 1939, the annual economic loss entailed in the present system was variously estimated at figures ranging up to \$20,000,000. The items in connection with which financial gains would accrue from these reforms include savings in costs of excess materials for bale coverings, in freight on excess weight of tare, in insurance, in reduced waste and damage to bale contents, in the elimination of costs of tare determination and of assessing and collecting tare claims, in customs duties on exports by a reduction in tare weights, and in the general simplification of trading practices.

(28) To whom would the benefits of net-weight trading accrue?

Although net-weight trading would be of either direct or indirect advantage to cotton growers, marketing agencies, cotton manufacturers, and consumers of cotton goods, the principal direct advantages would accrue to cotton growers and consumers of cotton goods. Under competitive conditions in the marketing of raw cotton and the manufacturing of cotton goods, any reduction in the cost of marketing could be expected to be passed on to producers or to ultimate consumers. The reduction in costs of marketing that would result from the adoption of net-weight trading would probably be divided between these two groups.

#### PROBLEMS INCIDENT TO THE ADOPTION OF NET-WEIGHT TRADING AND STANDARDS FOR TARE

(29) Under the proposal for the adoption of net-weight trading and standards for tare, who would be responsible for ascertaining and designating the net weight of bales?

Persons who do the weighing of the bales would designate the net weight in each instance. Such persons would be expected to be able to recognize the bale-covering materials used, to know the standard weight in each instance, and to deduct the tare from the gross weight of the bales in order to arrive at the net weight for purposes of settlement.

(30) How would the tare be determined on old stocks of cotton for purposes of net-weight trading?

It is probable that a substantial proportion of the accumulated surplus of cotton carried over at the time the requirement for net-weight trading and the use of standards became effective, would not be covered with standard tare. For bales covered with non-standard materials, the weight of tare would have to be mutually agreed upon between buyers and sellers or, failing in this, the weight of tare would have to be ascertained by stripping and weighing

the bale coverings as is now done for a substantial part of the cotton sold in export markets and to domestic mills. The necessity for this procedure would be only temporary and would apply only to stocks of cotton ginned before the effective date of the standards for tare.

(31) Would the enactment of Federal legislation providing for net-weight trading and standardization of tare require modification of trade rules and contracts of the futures exchanges?

At present, contracts for the future delivery of cotton made subject to the rules of the various futures exchanges provide for settlements based on gross weights with fixed and definite allowances for tare. Obviously, the adoption of net-weight trading would necessitate the modification of these rules and the contracts subject thereto.

(32) Would there be any difficulty in securing needed adjustments in the tare provisions of foreign contracts?

Although the trading rules of many of the foreign cotton exchanges do not make definite provision for the use of actual net weights for transactions in American cotton, in practice a substantial proportion of our exports are now sold on terms involving settlement on actual net weights. As has been shown previously, more than 30 percent of the cotton exported during the season 1937-38 was sold in this way.

The rules of the cotton-trade organizations of Liverpool, Manchester, and Milan now make provision for actual net-weight contracts.

The International Cotton Committee of the International Federation of Master Cotton Spinners' and Manufacturers' Associations at its meeting held at Milan, Italy, in November 1938, adopted a resolution requesting all cotton exchanges in the world to modify their rules to permit of trading in American cotton on actual net weights.

In view of the progress that has already been made in changing to an actual net-weight basis for cotton sold in foreign markets, it is not anticipated that the complete transition to this system would present any serious problems.



THE PROPOSAL FROM THE STANDPOINT OF  
VARIOUS INTERESTED PARTIES

(33) What responsibility would attach to farmers, ginnermen, compressmen, cotton merchants, manufacturers of bale-covering materials, or distributors of bale-covering materials for the use, shipment, or sale of nonstandard materials after the effective date of the standards for tare?

Legislative proposals that have been made to date for the standardization of cotton-bale tare provide in substance that it shall be unlawful for any person to ship or deliver for shipment in commerce any bale of cotton ginned after the effective date of the tare standards on which the bagging, ties, or patches do not conform with such standards for tare. It is contemplated that responsibility for the manufacture and distribution of bale-covering materials conforming to the tare standards would be placed upon manufacturers or distributors of such materials. Farmers, ginnermen, compressmen, and cotton merchants who ship cotton ginned after the effective date of the tare standards would be relieved of responsibility by using materials guaranteed by the manufacturer or distributor to conform to the standards. In the case of such guaranty, the seller of the material would be amenable to prosecutions, fines, or other penalties which would otherwise attach in due course to the shipper of cotton covered with nonstandard materials. This provision would protect farmers, ginnermen, compressmen, and cotton merchants who act in good faith in the covering of cotton bales.

Obviously as to interstate and export transactions, the deliberate use of nonstandard materials would not only be unlawful but would operate to reduce the salability of bales of cotton so covered.

(34) Would the adoption of net-weight trading and standards for tare place an extra burden on ginnermen, compressmen, and warehousemen?

Neither ginnermen nor compressmen nor warehousemen would be directly affected by the adoption of net-weight trading except that records of bale weights would be in terms of net weights rather than gross weights as at present. The adoption of standards for tare would, however, require that bagging and ties used by ginnermen, and patches and ties applied to bales by compressmen, conform to the tare standards. As the costs of these materials would continue to be passed on to growers or cotton merchants, as the case may be, this would not place any hardship on such service agencies as ginnermen, compressmen, and warehousemen.

The provision of an interval between the promulgation of tare standards and the date upon which their use would be required, would enable such groups to use existing stocks of nonstandard materials before the effective date of the standards.

(35) Would standardization of tare cause serious hardship to manufacturers and distributors of cotton bale-covering materials?

If tare standards were adopted, manufacturers and distributors of bale-covering materials would have a market for only those materials that would conform to the standards. For manufacturers and distributors of those materials for which standards were provided, this would require merely an adjustment to the standards. Manufacturers or distributors of materials not provided for in the standards would find it necessary to change to standard materials or to discontinue business in this field.

If the tare-standardization program included all the suitable materials now in use, the necessary adjustment on the part of manufacturers and distributors would be relatively simple. The standards would require the production and distribution of materials of dimensions, weight, and strength within a prescribed range of tolerance. In most instances this could be accomplished with present equipment and facilities. In some instances changes in the quality of raw materials used might be necessary in order to meet strength requirements.

The adoption, without notice, of definite standards for tare would probably find manufacturers of bale-covering materials, dealers, ginners, and compressmen with stocks of such materials on hand that would not conform to the standards. In fairness to these interests, a sufficient interval of time would need to be allowed between the date the standards were promulgated and the effective date of such standards to permit using up, as nearly as practicable, existing stocks of nonstandard materials. Probably a year would be required for this adjustment.



RELATION OF NET-WEIGHT TRADING AND STANDARDS FOR TARE  
TO IMPROVEMENTS IN COTTON PACKAGING

(36) Would the adoption of net-weight trading and standards for tare provide a complete remedy for the present unsatisfactory situation with respect to the appearance of American cotton bales?

Although the adoption of net-weight trading would remove obstacles to improvements in the packaging of American cotton and the adoption of tare standards would provide a positive means of improvement, it should be recognized that these reforms alone would not completely solve the problem of unsatisfactory packaging. Under present methods of sampling, samples usually are cut from two sides of each bale with each change or prospective change of ownership of the bales. The result is that the original bale coverings usually are badly mutilated and in some cases almost completely destroyed by the time the bales reach the consuming mill. Although the use of more suitable materials for the original wrapping would improve the appearance of American bales, the problem of a satisfactory package would not be completely solved in this manner. Fundamental changes in sampling methods will be required before a complete solution is reached.

(37) What can be done to solve the problem of sampling?

It is believed that the solution to the problem of sampling can be found in devising a means for the mechanical sampling of bales of cotton while they are being formed at the gin so as to provide samples that represent a cross-section of the bale as an instance for use in trade channels. This would eliminate the need for cutting the bales after they are turned out of the gin press and would provide a more satisfactory basis for the classification of cotton than is afforded under the present system of sampling. Members of the technical staff of the Agricultural Marketing Service of the U. S. Department of Agriculture are working on this problem with a view to its solution.

